

### **REMARKS**

Claims 1-8 are now pending in the application. Claim 1 has been amended herein. The basis for this amendment can be found throughout the specifications, claims, and drawings originally filed. No new matter has been added. The preceding amendment and the following remarks are believed to be fully responsive to the outstanding Office Action and are believed to place the application in condition for allowance. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the remarks contained herein.

### **REJECTION UNDER 35 U.S.C. § 103**

Claims 1-8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Vasileiadis et al (U.S. Pat. No. 6,919,062) in view of Lee et al (U.S. Pat. Pub. No. 2005/0130003). This rejection is respectfully traversed.

Lee appears to only qualify as prior art under 35 U.S.C. § 102(e). Applicant includes herewith a Statement of Common Ownership for Lee. Therefore, it is believed that Lee is not available as a prior art reference under MPEP § 706.02(l)(2). Accordingly, withdrawal of the instant rejection is respectfully requested.

In addition, Applicant notes that amended claim 1 recites a "fuel cell system... comprising: a fuel cell stack including a plurality of proton exchange membranes... and a plurality of coolant passages extending between adjacent ones of said plurality of proton exchange membranes; and a conduit in fluid communication with said coolant passages... and comprising a first layer of hydrogen-permeable material." Vasileiadis discloses feed gases flowing through a permreactor-separator, yielding a hydrogen-

based gas that can be supplied to an anode side of a fuel cell stack (Abstract, Fig. 11). Vasileiadis further discloses the permreactor-separator comprising a hydrogen permeable tube (col. 3, line 65 to col. 4, line 9). As the Examiner acknowledges, Vasileiadis does not disclose coolant passages passing between the membranes of the fuel cell. In addition, Vasileiadis does not disclose the permreactor-separator comprising a hydrogen permeable tube in fluid communication with coolant passages.

The Examiner cites Lee for teaching coolant passages between the membranes of fuel cells. The Examiner also asserts that it would have been obvious to employ the cooling arrangement of Lee in the fuel cell of Vasileiadis in order to control stack temperature and reactivity between the cells. However, Lee does not teach or suggest a conduit in fluid communication with coolant passages and comprising a first layer of hydrogen-permeable material, as claimed.

Moreover, Applicant submits the modifications of Vasileiadis suggested by the Examiner are an impermissible hindsight reconstruction of the claimed fuel cell system. "To reach a proper determination under 35 U.S.C. 103... impermissible hindsight must be avoided and the legal conclusion [of obviousness] must be reached on the basis of the facts gleaned from the prior art." MPEP §2142. Neither Vasileiadis, nor Lee, nor a combination thereof teach or suggest a conduit in fluid communication with coolant passages and comprising a first layer of hydrogen-permeable material, as claimed.

Accordingly, the prior art fails to teach or suggest all of the limitations of amended claim 1. Claims 2-8 depend from claim 1 and should be in condition for allowance for the reasons set forth above. Therefore, reconsideration and withdrawal of the rejection of claims 1-8 are respectfully requested.

**STATEMENT OF COMMON OWNERSHIP**

U.S. Patent Application Serial No. 10/717,356 (Reel 014726 / Frame 0625) and U.S. Publication No. 2005/0130003 (Reel 012923 / Frame 0341), were, at the time the invention of U.S. Patent Application Serial No. 10/717,356 was made, owned by General Motors Corporation.

**CONCLUSION**

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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